SHIMIZU, Y.

SERIAL NO.: 09/719,316

Page 2 of 10

Amendments To The Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A collagen material consisting of a matrix of a non-woven fabric-like multi-element structure of collagen fibers having ultra-fine fibers of collagen as its basic unit,

the matrix being filled with a substance having biocompatibility that can be degraded and absorbed in the body,

wherein said substance having biocompatibility that can be degraded and absorbed in the body is fibrous collagen fiber or a substance selected from the group consisting of polyglycolic acid, polylactic acid, copolymer of glycolic acid and lactic acid, polydioxanone, copolymer of glycolic acid and trimethylene carbonate, and a mixture of polyglycolic acid and polylactic acid,

wherein said non-woven fabric-like multi-element structure of collagen fibers is composed of collagen plate fibers having a diameter of 20-50 µm randomly intertwined,

said plate fibers are composed of collagen fibers having a diameter of 5-8 µm, wherein the collagen fibers overlap in the coaxial direction,

said fibers are composed of bundled rows of narrow collagen fibers having a diameter of 1-3 µm alternately overlapping as warp and weft,

said narrow fibers are composed of bundled fine collagen fibers having a diameter of 30-70 nm, and

said fine fibers are composed of ultra-fine collagen fibers having a diameter of 3-7 nm that are comprised of several bundled collagen molecules.

2. (Previously presented) The collagen material according to claim 1, wherein said substance having biocompatibility that can be degraded and absorbed in the body and being filled into said matrix is fibrous collagen fiber containing ultra-fine fibers of collagen newly formed by performing a freezing and freeze-drying procedure to a hydrochloric acid solution of extracted collagen introduced into said matrix.

SHIMIZU, Y.

SERIAL NO.: 09/719,316

Page 3 of 10

3. (Previously presented) The collagen material according to claim 1, wherein said substance having biocompatibility that can be degraded and absorbed in the body and being filled into said matrix is selected from the group consisting of polyglycolic acid, polylactic acid, copolymer of glycolic acid and lactic acid, polydioxanone, copolymer of glycolic acid and trimethylene carbonate, and a mixture of polyglycolic acid and polylactic acid, and is used as a mesh-like sheet or tube, or a non-woven fabric-like sheet or tube.

- 5. (Currently amended) A collagen material in which a biocompatible substance that can be degraded and absorbed in the body is filled into a non-woven fabric-like matrix composed of that selected from the group consisting of polyglycolic acid, polylactic acid, copolymer of glycolic acid and lactic acid, polydioxanone, copolymer of glycolic acid and trimethylene carbonate, and a mixture of polyglycolic acid and polylactic acid, wherein said collagen material has one-point support tensile force of at least 5 N and rupture resistance tensile force of at least 15 N in the wet state (for a thickness of 1 mm).
- 7. (Original) The collagen material according to claim 5, wherein said substance having biocompatibility that can be degraded and absorbed in the body and is filled into said matrix is amorphous collagen obtained by air-drying a hydrochloric acid solution of extracted collagen introduced into said matrix, or collagen fiber containing ultra-fine fibers of collagen newly formed by performing a freezing and freeze-drying procedure to said hydrochloric acid solution of extracted collagen introduced into said matrix.
- 8. (Currently amended) The collagen material according to claim 7, wherein said collagen fibers are composed of [[that in which]] collagen plate-like fibers having a diameter of 20-50 μm are randomly intertwined, said plate-like fibers are composed of [[that in which]] collagen fibers having a diameter of 5-8 μm overlap in the coaxial direction, said fibers are composed of [[that in which]] bundled rows of narrow collagen fibers having a diameter of 1-3 μm are alternately overlapping as warp and weft, said narrow fibers are composed of [[that in which]] fine collagen fibers having a diameter of

SHIMIZU, Y.

SERIAL NO.: 09/719,316

Page 4 of 10

30-70 nm are bundled, and said fine fibers are composed of [[that in which]] ultra-fine collagen fibers having a diameter of 3-7 nm that are comprised of several collagen molecules are bundled.

- 9. (Previously presented) The collagen material according to claim 2, wherein said collagen material has one-point support tensile force of at least 30 N and rupture resistance tensile force of at least 65 N in the dry state, and has one-point support tensile force of at least 1.4 N and rupture resistance tensile force of at least 6.5 N in the wet
- 10. (Previously presented) The collagen material according to any one of claims 3, 5, 7 or 8, wherein said collagen material has one-point support tensile force of at least 10 N and rupture resistance tensile force of at least 25 N in the dry state, and has one-point support tensile force of at least 5 N and rupture resistance tensile force of at least 15 N in the wet state (for a thickness of 1 mm).